# Communication breakdown in Gram-negative pathogens

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# Stellingen

Behorende bij het proefschrift

## Communication breakdown in Gram-negative pathogens By means of AHL quorum quenching acylases

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1. PvdQ acylase can be employed as a quorum quencher that turns against its own natural producer, *Pseudomonas aeruginosa* (this thesis).
2. Penicillin V acylases are repurposed from biocatalyst in industrial antibiotic manufacturing to quorum quenching enzymes based on their ability to hydrolyze *N*-acylhomoserine lactones (this thesis).
3. Preclinical testing in animal models is indispensable in a drug development process. The real challenge is to develop relevant models (this thesis).
4. Enzymatic nomenclature could be a source of confusion when determining the physiological role of an enzyme (this thesis).
5. The finding of antibiotic resistance genes in ancient permafrost soil proves that antibiotic resistance is not exclusive to the age of modern medicine (Nature 477.7365 (2011): 457).
6. By understanding that our antibacterial resources are limited while resistance is nearly inevitable, every country should apply a strict antibiotic stewardship program.
7. Education should be a right, not a privilege.
8. PhD's daily mantra: I have never tried that before, so I think I should definitely be able to do that (Pippi Longstocking, written by Astrid Lindgren).
9. Growth and comfort certainly do not coexist.
10. The fact that Kary Mullis had his eureka moment for PCR invention while driving to his weekend cabin, highlights how important having holiday is for researchers.
11. Scientific conferences are equivalent to music festivals, but even better because we get to talk to and have discussions with scientists who are rock stars in their field.